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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,959	11/10/2004	Josuke Nakata	F-8437	7120
28107	7590	07/27/2006	EXAMINER	
JORDAN AND HAMBURG LLP 122 EAST 42ND STREET SUITE 4000 NEW YORK, NY 10168			HAFIZ, MURSALIN B	
			ART UNIT	PAPER NUMBER
			2814	

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/511,959	NAKATA, JOSUKE	
	Examiner	Art Unit	
	Mursalin B. Hafiz	2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/19/04, 11/15/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Requirement for Restriction/Election filed on May 10, 2006 is hereby withdrawn in view of applicant's reply filed on June 13, 2006.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8, and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ketsusako et al (JP 9-162434 A).

Regarding claim 1, Ketsusako et al disclosed in Fig. 5-12, a light receiving or light emitting device in which a plurality of particulate semiconductor elements [35, 31, 32] that have a light-to-electricity transducing function or an electricity – to-light transducing function are incorporated lined up in at least one row [Fig. 18], this device being characterized in that

Each of said semiconductor elements has a pair of electrodes [35 and 32] that are disposed in spot form on both end parts of the elements with the center thereof interposed;

A pair of conductive wire members [33 and 34] that connect the plurality of semiconductor elements [35, 31, 32] in each row in parallel are provided; and

A transparent covering material [36] that covers all of the semiconductor elements and conductive wire members in embedded form is provided.

Regarding claim 2, Ketsusako et al disclosed in Fig. 11, a plurality of semiconductor elements [1] are arranged in one row, and the conductive wire members and covering material possess flexibility and are constructed as a flexible cord.

Regarding claim 3, Ketsusako et al disclosed in Fig. 11-18, a plurality of semiconductor elements are arranged in a plurality of rows on a same plane, the conductive wire members and covering material possess flexibility [Fig. 11], and the device is constructed like a panel with flexibility [Fig. 12].

Regarding claim 4, Ketsusako et al disclosed in Fig. 1-18, a plurality of semiconductor elements are arranged in a plurality of rows on a same plane, the covering material is made of hard synthetic resin [19], and the device is constructed in a form of a hard panel [Fig. 4].

Regarding claim 5, Ketsusako et al disclosed in Fig. 18, the semiconductor elements in each row are connected in series to semiconductor elements in one or more rows adjacent to the row by conductive wire members.

Regarding claim 6, Ketsusako et al disclosed in Fig. 13, the semiconductor elements comprise a spherical element main body made of p type or n type semiconductor; and a pn junction, and the pair of electrodes are connected to both ends of the pn junction.

Regarding claim 8, Ketsusako et al disclosed in detail description paragraph 1, semiconductor elements consist of light receiving elements and the

Art Unit: 2814

device is a solar cell panel that receives sunlight and converts the light into electricity.

Regarding claim 11, Ketsusako et al disclosed in Abstract, a protective film is formed on at least one surface of the covering material [glass fiber coated with Ti and further overcoated with Ag].

Regarding claim 12, Ketsusako et al disclosed in Abstract, a reflective film that reflects light is formed on any one surface portion of the covering material [glass fiber coated with Ti and further overcoated with Ag. Ag is well known light reflective material.].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ketsusako et al (JP 9-162434 A) in view of Nakata (US 6,744,073 B1).

Regarding claim 7, Ketsusako et al disclosed all the limitations of the claim except the semiconductor elements comprise a cylindrical element main body. However, Nakata et al teaches an analogous device where spherical elements are interchangeable with cylindrical element [column 2 lines 10-25]. It would have been obvious to one of ordinary skill in the art at the time of the invention

Art Unit: 2814

was made to incorporate Nakata's teaching into Ketsusako et al's device at least to make the handling easier [column 1 lines 60-65].

Regarding claim 10, Ketsusako et al disclosed all the limitations of the claims except partially cylindrical lens parts that correspond to the semiconductor elements of the respective rows are formed in a vicinity of a surface of the covering material. However, Nakata et al teaches an analogous device where partially cylindrical lens [31] parts that correspond to the semiconductor elements of the respective rows are formed in a vicinity of a surface of the covering material. It would have been obvious to one of ordinary skilled in the art at the time of the invention was made to incorporate Nakata's teaching into Kesusako et al's device at least to efficiently introduce sun light to the device [column 7 lines 50-60].

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ketsusako et al (JP 9-162434 A) in view of Nakata (US 6,204,545 B1).

Regarding claim 9, Ketsusako et al fails to disclose that semiconductor elements consist of light emitting elements and the device is surface emitting light emitting panel. However, Nakata teaches an analogous device where the semiconductor element can be light emitting elements and the device is surface emitting light emitting panel [column 7 lines 10-50]. It would have been obvious to one of ordinary skilled in the art at the time of the invention was made to incorporate Nakata's teaching into Ketsusako et al's device just by applying voltage which is well known in the art.

Allowable Subject Matter

Art Unit: 2814

Claims 13 and 14 are allowed.

Regarding claim 13, prior art does not teach retaining late is fitted into an opening part of the temporary fastening plate, respective semiconductor elements are fitted in the retaining holes, and intermediate portions in the direction of height of the semiconductor elements are held by the retaining holes in corporation with other limitations of the claim.

Claim 14 depends on claim 13.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mursalin B. Hafiz whose telephone number is 571-272-8604. The examiner can normally be reached on m-f 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2814

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mbh



HOAI PHAM
PRIMARY EXAMINER